

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-274296

(43)Date of publication of application : 26.09.2003

(51)Int.Cl.

H04N 5/44

H04B 7/08

(21)Application number : 2002-067041

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(22)Date of filing : 12.03.2002

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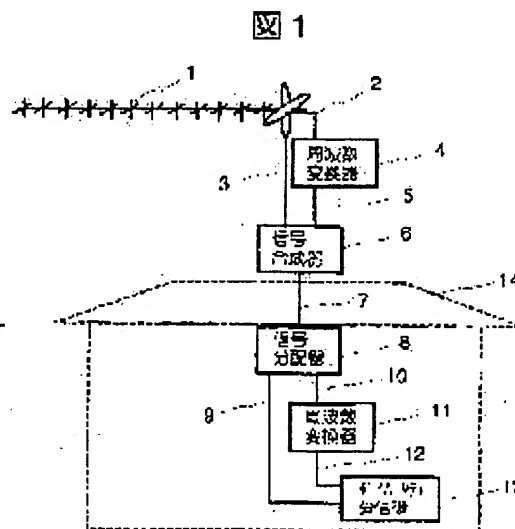
KANBARA KOHEI

## (54) BROADCAST RECEIVING FACILITY AND DIVERSITY RECEIVING SYSTEM

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a technology which enables broadcasting reception with a diversity technology by using an existing broadcast receiving facility without installing additional signal cables.

SOLUTION: A broadcast receiving facility is equipped with more than two antennas that receive a broadcast wave of the same frequency band, a first conversion means that converts, at least, one of frequency bands for feed signals fed through the antenna into the frequency band which is different from the received frequency band, a mixing means that mixes the feed signals, the frequencies of which are converted, and the feed signals from the antenna, the frequencies of which are not converted, and a feed line that transfers the feed signals output from the mixing means to an image receiving site. The broadcast receiving facility is also equipped with a distributing means that distributes the feed signals transferred with the feed line to the feed signals of which frequencies are converted and to the feed signals of which frequencies are not converted, and a second conversion means that converts the feed



signals being distributed, the frequencies of which are converted, to the feed signal, the frequency band of which is the receiving frequency band.

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11)特許出願公開番号

特開2003-274296

(P2003-274296A)

(43)公開日 平成15年9月26日(2003.9.26)

(51) Int.Cl.<sup>7</sup>

識別記号

FI

テ-マコ-ト\*(参考)

H04N 5/44

H O 4 N 5/44

A 5C025

H04B 7/08

H04B 7/08

A 5K059

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審査請求 未請求 請求項の数 4 O L (全 10 頁)

(21)出願番号 特願2002-67041(P2002-67041)

(22) 出願日 平成14年 3 月12日 (2002. 3. 12)

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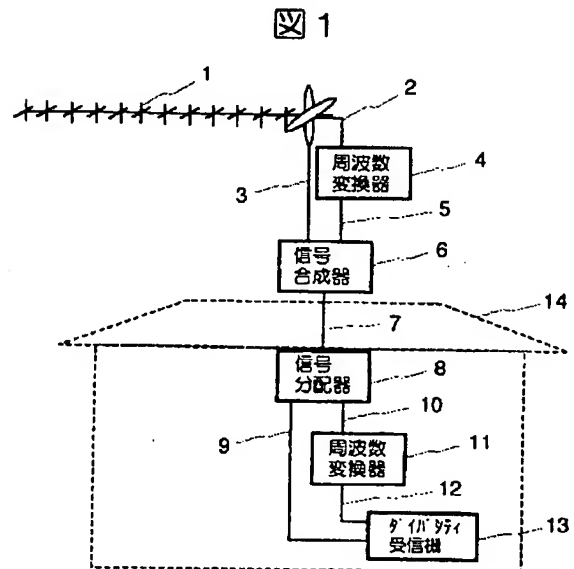
(54) 【発明の名称】 放送受信設備及びダイバシティ受信装置

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 UæHSOT' M - g ~. SOS" Q  
 g g ~. % A^c~. SOU  
 ~fW^ M ~.0B- fW^ M ~.t  
 E% nec lM "A... t SOV~... t tE  
 ØB- t tE%M "AeessOWy flæ~¶  
 æHSOX »E...E ~tEØBflæ~¶æHSOX  
 ~"A... t tE%M ' l K[hC ^  
 [o . ¶~AneclV { flæM iV {  
 M jy eest v g M iN bNM  
 j"~¶tEØB--A{ { ' ~"A- ñ  
 æ~¶æHSOX' eessOW tEØN b  
 NM V { M P Lo [qSPp'  
 Lo A g M ~.ØB

9

yOORVzEBAeessOW~^AneclV {  
 ALlV { .0æ 'ç~ <t{  
 G~ieesj { .0~ LAnec1%  
 d >B- eessOW' o~ ^Aslb  
 bis l  
 b b  
 jM "t [ oLiSPO ~tE0B  
 - t [ oLiSPO~^t [ flæM "  
 o+EAflæ~fæHSOX ~tE0B] ^A{  
 { ^~A- flæ~fæHSOX tE 10  
 0Bt [ flæM it [ M j Q Lo  
 {qSPQ' Lo A g M ~  
 çB  
 yOORWz- / A{ { g M  
 Lo PW^An^fW^ æ dM '  
 Lo %N bNM AV { M 0ç~t [  
 M pç~A Py Q g ~. " g  
 ~. s/ ^A g ~. N .0 g .  
 E.0~^~'¥~^0Bt ^A ~f pç0  
 M M ' E%M g M ~ 20  
 pç0 ^A Py Q g ~. "/ g  
 ~fi ^ < )f0~^~'¥~^0B  
 yOORXz A)Q ^ç~A{ {  
 P g ~. S 0 g ~.fi .0B  
 yOOSoz "[qPT' dM " ~tE0  
 ^A ,A dM ~" PU L P " M  
 PV~ Q " M QS~ " tE0B P "  
 M PV~ g M Lo PW ~tEA  
 nec1 tæH L t+En^fW^ æ  
 g M PX " Lo+tE0B Lo+tE% 30  
 g M PX~>U QO ~tEA>U Q  
 O M ~^gp+tE~ [J M QP~f<  
 tE0~tE0B [J M QP~ g ~. QQ  
 ~tEA g ~. QQ 0 g ~.  
 M ~0B0EA" PU~^f+tE% Q "  
 M QS~ g ~. QQ ~tEA¥ L+tE  
 % g ~. tE0~[qQR' g ~. tE%  
 dM ~^o~tE0B  
 yOOSPz- / A{ { P g  
 ~. S~^A Y P g ~. S ~tE% 40  
 dM 'g' Lo+tE% g M flæ  
 % [J M QP ^ç~A dM ¥ L+tE  
 E% g ~.0~^A ç g Lx 0~  
 ~^~0B  
 yOOSQz %Afi zu+tE0 Q g ~.  
 PP g ~. tE% dM ' Lo+tE%  
 g M flæ % [J M QP ^ç~A  
 g ~. tE% dM t g dM ~  
 .0B~. çAn^fW^ æ dM '  
 Lo % g M ~ç/flæ M % 50

10

g ~. s/ ^A Py Q g ~.  
 SCPP N .0 g . E.0~^~'¥~  
 ~0B  
 yOOSRz~^ & / A{ { ^ \_C  
 oveB M u~^AN X" A eiP~>E...  
 E M %flæ g æ g dM .  
 ^A ,A P g ~. S~E% dM ~  
 0 P dM g M+tE% g ~  
 ~0 g ~.0B AM < U" P  
 g ~. S L g ~. tE% P dM ~  
 N X" A eiP' g ~. tE~ç dM  
 i Q dM j~ <i< j A- <t  
 E% dM i < dM j ' .0  
 d ~0 S M P[u V o~.0B  
 yOOSSz- S M P[u V ...[/."  
 ç / ^M "z W" flæA- M "z  
 W~^ tE% < dM g ~. tE% P  
 dM ~OL g ~. tE~ç~ç Q dM  
 ~ "z.0B AM "z W L"z+tE%  
 dM ^A g ~. tE% P dM Q  
 g ~. PP" M+tE% g dM  
 ~.0¥<~^~ç0 ^A d ~^P{  
 S M P[u "z tE~ç00f Z PS  
 æ M l~^~A\_CoveB Kv~^0  
 ~0A ei~ M+tE%flæ g dM  
 fiO' fi .0æ M l~.0~^~^~0B  
 yOOSTz] ^A\_CoveB M@PR dM  
 ~^AM "z W~^z+tE% g ~. tE  
 ~ç Q dM ^A Q g ~. PP L  
 M g g ~. tE% P dM ~  
 ~.0~^~^~0B~^LA\_CoveB M@  
 PR~N X" A eiP' % g 0ç"  
 ...g dM ~^D~ dM I .0A  
 0ç~^~flæ g dM < ~gp.  
 0~^~^~0B~^A\_CoveB M@PR  
 ^Ae g ^D~ M~. ç~^fi 0 M<  
 ¥ E" fi.0~^~'¥~^0B  
 yOOSUz~^A{ { ^ \_CoveB M  
 u~^A P g ~. S~ dM ' g ~  
 . gp.0 M f<.0¥<~^~A~E  
 L+tE0~^~çBæf ,A)R f. / A  
 >>Uq m Ufiqfq ~ [J M  
 f<.0¥<~.0~^~^A~ fiO u.0  
 Kv" 0 P g ~. S ¥< "f>~<  
 0B% A)R i j~^... { ^ P  
 g ~. S T~¥< .0% } ^LA)  
 R i j~^... { ^ P g ~. S  
 T~¥< .0% } ^0B  
 yOOSVz}R ~ç~AQ T~ g ~. tE%



11

dM AQU~>U AQV~ [J M AQW~  
 M AQX~ < ARO~"z ARP~>U A  
 RQ~ g ~. f.B  
 YOOSWz)R i j f. P g ~. S  
 "AÆf, >>Uq m Ufiqfq ~  
 [J M QV ¶<•0>U QU L ~"LA  
 g ~. QQ~>U QU'g"¶< % [J M  
 QV ^c~A ~[q' ~+EØ dM  
 iÆf, A P dM j ¥ L+E% g  
 dM QT ~..ØB 10  
 YOOSXz- ~"A fi / ~"Ø Q g ~.  
 PP~ >>Uq m Ufiqfq ~  
 [J M QV ¶<•0- ~"¥- Ø" A Py  
 Q g ~. SCPP N •Ø g ~. "  
 <>~" / -A... { ~"A P  
 g ~. S' ~"ØM i M QWj  
 Q g ~. PP ~. Ø¥<~ ~cØB  
 ' ~" A Py Q g ~. SCPP >  
 E...E fi¶>U g >U fi~ c-~"  
 c/ ~" cB 20  
 YOOTOz~" zA>U QU~ [J M QV  
 ¶< o~"•0~ / A M QW ¶<•0B-  
 -A{ { ~"A>U QU~¶<+E%  
 M QW~A < QX L g ~. P  
 dM ~ <+E% A o~[qQR L M <  
 U o~+EØB~"A- < QX~M < U  
 ~E ~< ~ c-~"c/ ~" cB  
 YOOTPrzEBA Q g ~. PP~A ~[  
 qPT' ~+E% dM ~ < QX L  
 <+E% g ~. +E% P dM ~ M Q 30  
 W~ "z.Ø"z RO L ~cØB"z RO-  
 "z+E% M QW~A>U RP ~+EØB  
 &A>U RP~ M ~ % [J M  
 QV ¶<•0¥<~"~ cØB--A g ~.  
 RQ~- [J M QV ^c~A"z RO  
 -"z+E% g ~. +E% P dM +  
 g ~..Ø¥<~"~ cØ -A Py Q  
 g ~. SCPP N •Ø g ~. E•Ø  
 -"~¥~"ØB~"A- "z RO~M "z  
 W~E ~< ~ c-~"c/ ~" cB 40  
 &Aæ M 1" S M P[u V E  
 "Afi / Q g ~. PP~ M QW  
 ¶< A P g ~. S •Ø-~'¥-  
 ØB ' ~" Auge y tge qfi  
 æ æ g M'¥~•Øæ M 1 E  
 "A< " iu[X^j "zu+  
 EA dM / " gM "fi /' fiO/  
 ~ +E" c¥<~"~ cØ -A P g ~.  
 S /' Q g ~. PP / M Q  
 W ~. ØKv" ØB

12

YOOTQz &A{ { ~"Aø¶ æ M  
 1 ~ S M P[u V p cØE '  
 c~ %"AÆf, uge y tge q  
 flæ æ g M'¥~•Ø] æ M  
 1 {L> Kp'¥~"~"c/ ~" cBÆf  
 , Auge Ctge Cqfiæ æ g M  
 •ØA ei~AeA ei" M &æ g dM  
 < •Ø< ~' "ØfiO/ æ M 1A  
 < ~' [q~ zu+EA< +E%  
 dM Q~" ~. Ø" ~A- "  
 L" +E%>E...E dM uge Ctge C  
 qfiæ e dM "z.Ø"z ' "Ø  
 fi / æ M 1 Kp'¥~ ØB- E  
 ~AÆf, A g ~. S Ø g "Ø¶ g  
 ~Ev ~c/ L•Ø~/ AM < U'  
 o" Ø¶ < "•Ø-~ LA<  
 ' "n^fw^ æ dM "< +E% dM  
 "o~+EØB &Afi / ~"A' [q' L  
 o % dM " -Q' " AÆß dM  
 M "z W ~ A...ß dM ø "z  
 "•ØB- / "¥<~"•Ø ~AM "  
 z W' " Q dM y g ~. +E% P  
 dM " Lo+EAø "z ' uge  
 Ctge Cqfiæ æ g dM ">E  
 ...E Lo+EØB  
 YOOTRz &A{ { ~" P g ~.  
 Sy Q g ~. "d, "Kv~"Ø"AÆf  
 .] qfiæ M•Ø% æ, •Ød  
 " / AM "z WA Q g ~. PPA  
 Øc~\_CoveB MøPR' ...<d, .  
 Ø-~ ~"A >~¥~ ØB >~qfiæ  
 M•Ø% æ, +EØd, ' >~"  
 P g ~. S d, ~Ø / "¥<~" ~  
 cB  
 YOOTSz &A{ { ~"A &, gp A  
 ei~ ... gp A ei~ Q'A ei~  
 EØfiE g dM ø S M P[u  
 V~>E...E' •ØE ^c~ %"AR'  
 "A ei~ M &fiE g dM '  
 ~ c-~"c/ ~" cB% A- E  
 "AA ei ¶% Py Q g ~.  
 SCPP fiA>E...E A ei" M & dM  
 g " "Ø g ~"Ø / g ~. %  
 "AM < U~ < S M P[u V~  
 Afi / ~+ g dM •Kv"  
 ØB  
 YOOTTz+ "A{ { ~"An^fw^  
 æ M ^c~ %"A-E L+EØ-  
 ~"~>A... æ gy ~Mp dg M Kp  
 ~¥~"~"c/ ~" cB

13

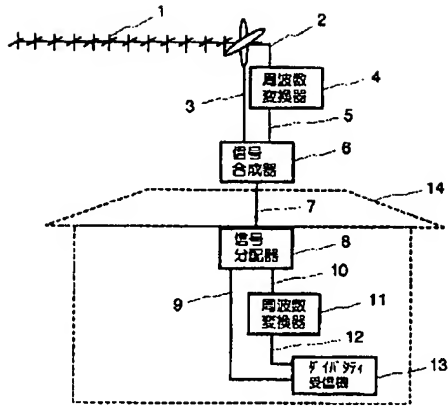
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 y O O U P z i S j n " f w ^ æ d M '  
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 y O O U Q z i T j n O z u + E O P g " ~ " . 30  
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 y O O U R z i U j n O z u + E O P g " ~ " .  
 ' n z u + E O Q g " ~ " M  
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 y ) ' " P " z  
 y ) P z { > E { " ~ " Ø \_ C o V e B M 40  
 u T " ~ " ~ " . Ø % } - Ø B  
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14

. Ø % } - Ø B  
 y ) R z ... { " g " ~ " . T " ~ " ~ " <  
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 P R c \_ C o V e B M Ø P S c z  
 P T c " [ q P U c "  
 P V c P " M P W c g  
 M L o  
 P X c g M Q O c > U  
 Q P c [ J M Q Q c g " ~ "  
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 Q V c [ J M Q W c M  
 Q X c < R O c " z  
 R P c > U R Q c g " ~ "  
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 > U æ H  
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 L o [ q

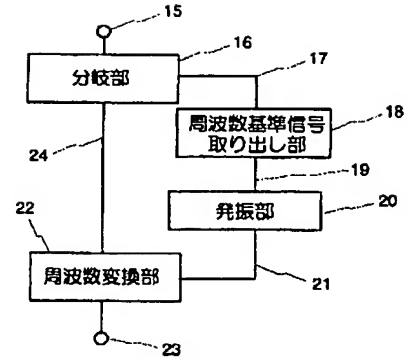
y } P z

図 1



y } Q z

図 2



y } R z

図 3

